

ABSTRACT OF THE DISCLOSURE

A heat treatment system comprises a plurality of feed lines for feeding a fluid, a plurality of treatment zones, each treatment zone is fed by one of the plurality of feed lines, and includes at least one chamber for holding a material and flowing the fluid through the material, a plurality of heating elements, wherein each heating element heats the material in at least one of the plurality of chambers, and a plurality of detection or sampling devices. A method of treating a material comprises the steps of feeding a fluid to at least one treatment zone, wherein the treatment zone includes a plurality of chambers, holding treatment materials, controlling flow rate of the fluid to the treatment zone, flowing the fluid through the material in each chamber, heating the material in chambers, flowing the fluid out of the chambers and analyzing the fluid flowing out of the chambers.